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23	CENTRAL INTELLIGENCE AGENCY
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	14 April 1978
MEMORANDUM	FCR: The Director of Central Intelligence
FROM	: John N. McMahon Deputy Director for Operations
SUBJECT	: MILITARY THOUGHT (USSR): Control Posts and Communications of a Combined-Arms Army During Advances Over Great Distances in the Initial Period of a War
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Intelligence Information Special Report

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COUNTRY	USSR		
DATE OF NFO.	Late 1962	DATE	14 April 1978

MILITARY THOUGHT (USSR): Control Posts and Communications of a Combined-Arms Army During Advances Over Great Distances in the Initial Period of a War

OURCE Documentary

Summary: The following report is a translation from Russian of an article which appeared in Issue No. 5 (66) for 1962 of the SECRET USSR Ministry of Defense publication Collection of Articles of the Journal 'Military Thought". The author of this article is General-Leytenant of Communications Troops P. Kurochkin. This article treats the matter of setting up control posts and communications of a combined-arms army during an advance over great distances. The author proposes setting up auxiliary control posts in departure areas and on lines of a complex situation, as well as utilizing traffic control posts and military transportation service posts to support control of troop movement, in addition to the forward command post, rear control post, and army command post. Regarding communications, a system of the combined employment of radio, wire, and courier means, with the additional allocation of state communications means is examined. Diagrams also are provided illustrating the organization of radio communications and wire communications. End of Summary

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Control Posts and Communications of a Combined-Arms Army During Advances Over Great Distances in the Initial Period of a War

by

General-Leytenant of Communications Troops P. KUROCHKIN

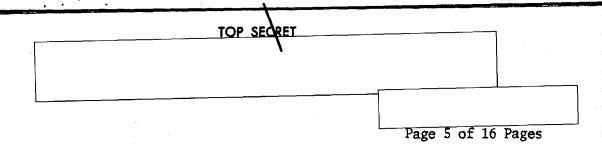
In our opinion, General-Mayor STEPSHIN in his article* did not sufficiently discuss the matter of troop control, and in regard to setting up communications, he confined himself only to brief remarks. He feels that the existing communications means of an army do not support reliable troop control during advances from the interior of the country, while state communications means from the very beginning of a war may be put out of action. It is also emphasized in the article that the situation will be complicated by the need to observe radio silence. The author sees a way out of these difficulties by having the General Staff or the front allocate a considerable amount of communications forces and means to the army.

It seems to us that it is impossible to agree with the way this matter is stated. In the initial period of a war the General Staff or front will hardly have the capability to allocate considerable communications forces and means to each army which is advancing. Control during the period of advance in all cases must be supported by existing means. On the basis of this assumption, we shall express certain opinions regarding the setting up of control posts and communications of a combined-arms army during an advance over great distances.

Troop control of an army under these conditions, unquestionably, is exceptionally important. This is due, first of all, to the fact that troop movement, as the experience of exercises shows, can be implemented by various methods, that is by organic means, and by rail, air transport, and water (sea and river) lines of transportation. Most frequently, troops will be moved by various types of transport simultaneously. Hence, one and the same unit of troops may be transported first by one method, and then by another. Thus, different rates of movement, different times for being on the line of march, and not a simultaneous but rather a successive arrival of large units and units at the designated area will be characteristic for

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^{*} Collection of Articles of the Journal 'Military Thought', No. 6 (61), 1961.

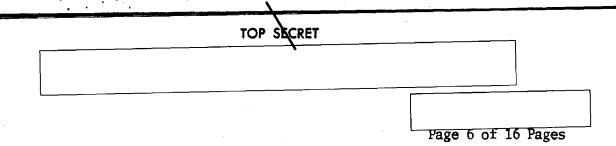


troops of an army during modern advances.

The conditions in which movement is carried out, primarily the possible nuclear action of the enemy against troops on transportation lines, will greatly affect troop control. Owing to this, large units of an army may suffer losses, which negatively affect the combat effectiveness of units, while roads and railways will be subjected to considerable damage. As a result, the operational disposition of troops of an army and the methods of movement must be changed, and measures for eliminating the aftereffects of nuclear strikes must be carried out. The creation by the enemy of vast zones of ground contamination on troop traffic routes will necessitate shifting routes and employing alternate routes during regrouping. During regrouping, the possibility of conducting combat against airborne assault landing forces or groupings of enemy ground troops which have broken through has not been ruled out, as a result of which combat actions may be conducted in the zone of the army's advance in various regions. All this requires the uninterrupted command of troops during an advance and considerably complicates control.

The location of control and traffic posts, and the existence of great distances between the control posts of an army, its subordinate troops, and the staff of the <u>front</u>, in whose composition the army belongs, will substantially influence troop control during an advance. During movement by various types of transport, part of the forces of motorized rifle divisions and tank divisions will be at a great distance from the divisional control posts. Owing to this, in the course of an advance in a number of cases the army command will have to control not only divisions, but also regiments directly.

It seems to us that, under the conditions examined, when setting up control posts it is necessary to ensure not only successive, but also simultaneous troop control in the departure area (when moving troops to routes, during entraining and emplaning), during movement, including when combat actions arise, and also in the concentration area. For example, during movement by various types of transport, that part of the army forces which is airlifted may already be in the concentration area on the first day of movement, while the transporting of troops by railroad, obviously, will take several days; at the same time, large units, which are following by organic means, may be on a day's halt, while some of them will have to conduct combat actions or restore their combat effectiveness after nuclear strikes by the enemy. Army control posts must be set up in such a way that control is provided simultaneously over the entire depth of the advance, which may reach 1,000 kilometers and more under present-day conditions.



It is advisable to set up an auxiliary army control post in the departure area which would maintain troop control during an advance of large units by organic means to march routes and during the boarding of units designated for transport by rail or air means.

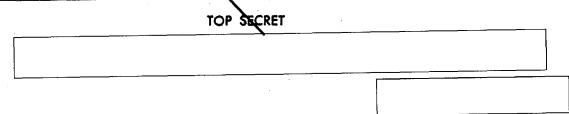
In our opinion it is inexpedient to give this task to the rear control post of an army, as <u>General-Mayor STEPSHIN</u> recommends. The rear control post has its own function -- to control rear services units of an army. Therefore, it must be located and moved with these units.

The army command post is called upon to maintain control of the main forces of the army during an advance. When the main forces are moved by organic means the command post is moved along with them. The experience of exercises has shown that it is best to allocate to the army staff that route which supports rapid and leapfrog relocation of all control means, and stable control simultaneously on all routes during the march, on day's halts, and also when it is necessary for part of the forces to conduct combat actions.

Depending on the situation, the forward command post is set up in the concentration area, especially when part of the army's forces are airlifted. It is called upon to provide troop control in the concentration area and to receive the preliminary instructions of the front commander and staff regarding the further actions of the army, that is, after the advance has been carried out. After the army command post arrives at the concentration area, the forward command post can be used for troop control when the army is committed to action.

In a number of cases it is necessary to set up auxiliary control posts with rather small operations groups of the army staff on lines of a complex situation or main "barrier lines", as the author designates them. These posts must be considered temporary, set up only while troops are crossing these lines.

Taking into consideration the nature of modern regroupings, in our opinion, an army commander cannot remain continuously at any one control post. By utilizing courier communications means, mainly helicopters, he should be at that post where at a given time the most complex situation is confronting the troops. For example, with the initiation of an advance, he might be at an auxiliary control post which has been set up in the departure area; during the march, he might be at the command post or one of the auxiliary control posts on the 'barrier lines', and when the regrouping has been carried out, he might be at the forward command post.



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Divisional control posts, as a rule, are placed in the march formations of divisions. Hence, there must be three control posts in a division: a command post at the head of the main column of forces, an alternate command post at the head of another column, and a rear control post at the head of the column of rear services units of the division. Each of these posts must be in constant readiness to provide troop control, in case the other two posts are put out of action.

To ensure stable control on 'barrier lines' it is advisable to stipulate short halts for one of the division's control posts which will thereby provide for the establishment of more reliable communications and the opportunity for personal contact between the army commander or the operations group and the division commander.

Timely warning of troops about the air and radiation situation is extremely important during an advance. Hence, information about the situation must be received from control posts of both our own air defense troops and those of allied countries. For rapid receipt of information, officers or operations groups of army air defense troops should be sent in advance with communications means to control posts of air defense large units of allied countries.

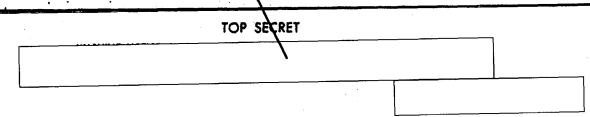
In addition to the enumerated army control posts, it is necessary to make use of road traffic control service posts and military transportation service posts at railroad stations (docks) to support control of troop movement. After receiving the necessary information about troop movement, the staff of the army must maintain communications with these posts.

We shall now examine some questions of organizing communications. First, let us discuss communications means. In the Armed Forces Communications Manual, it is pointed out that communications with units (large units) which are regrouping, is supported predominantly by courier and wire means.

We feel that these recommendations now are inappropriate for the nature and conditions of modern regroupings. Of course, courier and wire communications means will be employed during troop movement, including over great distances, however, they are completely insufficient for supporting troop control.

We must keep in mind that the situation in the zone of advance of army troops will change quickly and drastically. Within short time limits it is virtually impossible to collect and send information about the situation to





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the appropriate army control posts by courier means in a timely manner. Owing to the slow delivery of information about the situation to control posts, the information will lose its significance and the commander will be unable to make decisions which meet the operational situation. Even with the wide-scale employment of state communications means, it is impossible to support control, since communications centers and lines will be subjected to severe damage. In addition to this, it is necessary to expect frequent damage to wire communications from reconnaissance and sabotage groups of the enemy.

All this provides a basis to maintain that it is necessary to employ radio means to support reliable and uninterrupted troop control during an advance. Naturally, this must not disrupt the concealment of the advance. Therefore, radio means must be employed only when it is absolutely necessary, when it is impossible to use wire communications or courier means. Radio communications will be especially necessary for supporting troop control in case combat actions occur in the course of regroupings.

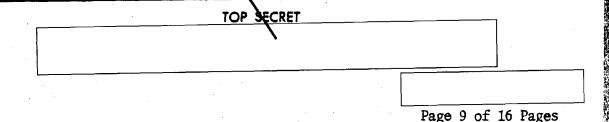
Thus, troop control during an advance, in our opinion, can be supported by the combined employment and skilful combination of radio, wire, and courier communications means.

The procedure for setting up communications should be as follows.

It is necessary to have communications centers in all the army control posts which have been listed. Each center must have radio, wire, and courier means, the number of which is determined by its function.

For troop control when combat actions are conducted in the course of an advance, radio communications are organized in an army and divisions by the usual procedure -- by setting up the necessary control, cooperation, and rear radio links and radio nets. Radio communications prepared in this manner are employed only during the unleashing and conduct of combat actions. This same system for setting up radio communications is used to support troop control when the army is committed to action after the advance has been carried out.

For supporting control of troop movement, radio communications must be set up so that concealment of the advance is maintained. For this purpose it is necessary to employ only ultra-shortwave radios in mobile control posts of the army and divisions. When shortwave radios are employed, radio communications should be set up through stationary radios which can be installed in the auxiliary army control post in the departure area, in the



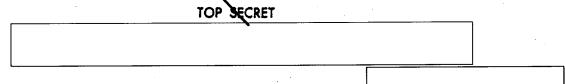
forward control post in the concentration area, and in the stationary auxiliary centers, which have been set up in the zone of the advance.

For supporting control of troop movement, radio communications of the army should be organized as shown in Diagram 1, based on the center principle, the essence of which consists in the following. Several stationary radio centers are set up in the zone of the army's advance, in each of which are one to two shortwave radios of medium power and three to four ultra-shortwave radios. With shortwave radios two-way radio communications are maintained between radio centers and with stationary army control posts (the auxiliary control post and the forward command post) and one-way communications are maintained with the mobile control posts of the army and divisions. Ultra-shortwave radios support two-way radio communications with the mobile control posts of the army and divisions.

It is advisable to set up stationary radio communications centers on the lines of water obstacles, mountain passes and other places where it is especially necessary to receive reports from troops and send appropriate instructions to them in a timely manner. Calculations show that it is necessary to set up six to eight stationary communications centers in the zone of the army to support communications throughout the depth of the regrouping. Three to four of these centers can be fully equipped with army means, while for the remaining ones it may be necessary to allocate part of the means from front communications units. Auxiliary centers of the front communications system can be used as stationary radio centers, if they happen to be in the zone of the army's movement. If it is necessary to support communications only over the depth of a day's march (this occurs when air transport is not employed for airlifting troops), then the number of stationary communications centers can be cut approximately in half.

We can recommend that, when the need arises to establish communications between a stationary center and the control post of one of the divisions at a distance exceeding the operating range of ultra-shortwave radios, ground or helicopter relay posts be set up. As we know, a ground relay post can increase the range of communications one and a half times, while the range of helicopter relay is, of course, greater. The positions where stationary centers and relay posts have been set up must be known to the troops.

When radio communications are set up in this way the transmission of necessary information will be carried out in the following manner. Reports from troops will be transmitted from mobile control posts over



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ultra-shortwave radios to the stationary centers, or over shortwave radios directly to army control posts, or, if the distance will not permit this to be done, they will be sent to another stationary center near which there may be an army control post. Instructions of the army will be sent to troops over shortwave radios installed in stationary centers, to receivers of division mobile control posts, or over ultra-shortwave radios first to the stationary communications center, and then by radios of the stationary center to the division control posts. In the same way information can be transmitted to army control posts from posts of the road traffic control service.

We must again emphasize that during the period of the advance it is necessary to rely on the employment of radio communications only in cases where transmission of reports or instructions cannot be delayed, for example, for transmitting signals about the enemy's employment of nuclear strikes, information about severe road damage, reports about an encounter with the enemy, etc. Other communications means should be employed for routine reports about the location of the troops in the course of the march, and also for sending instructions to the troops.

Wire communications for supporting troop control during an advance are set up on the basis of the wide-scale employment of state communications means and the wire communications net of the <u>front</u> to which the army belongs.

Wire communications of transportation lines are used to support control of troops transported by rail.

Field wire communications means of an army and troops are employed very limitedly, mainly on day's halts and in the concentration area, and also when combat actions are conducted in the course of regrouping.

Along with this it is necessary to keep in mind that when state wire communications are employed to support troop control during regroupings over great distances a number of difficulties arise connected with the need to employ means of different governments. In particular, difficulties may arise as a result of language differences and differences in the technical equipment of communications systems, and also because modern state communications involve a complex system of technical facilities, including underground and overhead lines, devices for channeling and for switching channels, and amplification and measuring devices, and cannot be employed as easily as field wire communications.



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Therefore, the employment of state communications means for supporting troop control during the regrouping of an army, obviously, will be determined by the high command and will be coordinated with allied governments. This requires that technical engineer personnel maintain the appropriate communications facilities, monitored by military representatives in the capacity of military communications Commandants, who are detached from the communications troops of the armies of each country through whose territory the troop movement is being carried out.

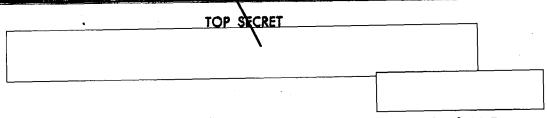
Let us examine a possible variant for allocating state communications means and their employment in support of an army which is conducting a regrouping.

Wire telephone and telegraph communications channels will be made available in centers of appropriate civilian communications facilities to support communications of an army during a regrouping. The channels allocated to the army can be brought to army control posts from these centers by field means. The secure communications equipment for these channels must, as a rule, be allocated from the army communications units.

It is advisable to allocate state communications channels to provide communications along the following links:

- -- for the communications of one of the army control posts with the staff of the front;
- -- for communications between army control posts, including communications with the army command post and auxiliary control post in the departure area and the forward command post in the concentration area, and also, when necessary, for the communications of the posts mentioned with the auxiliary posts set up on 'barrier lines';
- -- for communications with control posts on troop movement routes (hopefully on each main route, but at least one channel for two adjacent routes);
- -- on lateral lines so that checkpoints can communicate with one another and with the army control posts;
- -- for the communications of the control posts of air defense large units with the army control posts.





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Channels from the <u>front</u> communications system, allocated for supporting the communications of the army, can be employed in the same manner.

Thus, a wire communications net is formed from channels allocated from state communications means or from the communications system of the front. As is shown in Diagram 2, this net essentially encompasses the entire area in which troops of an army carry out an advance. From the diagram it is apparent that communications centers of the main and auxiliary control posts of the army and communications posts set up on troop movement routes are included in this net's system in addition to the communications channels. In our opinion, we should have these posts on each route. The distances between them should not exceed 60 to 70 kilometers, so that the delivery of reports can be supported by courier means or so that the arrival of a person in authority from a mobile control post for consultations will not take more than an hour.

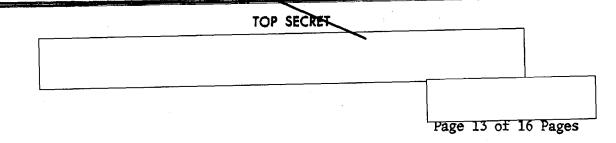
In order to conserve field means it is advisable to place communications posts near civilian facilities, through which the channels supporting communications along the troop movement route pass. However, this cannot always be done. Very often it is necessary to set up communications posts at a distance from civilian facilities especially on lines where a complex situation is expected, or on routes whose axis does not coincide with the direction of the state communications lines. In these cases, the communications post must be connected with the closest civilian communications facility by field wire or radio-relay lines, and sometimes even by ulta-shortwave communications lines. If the situation permits, then it is best to combine communications posts with traffic control posts.

Courier means of communication, especially helicopters, will have considerable importance in supporting troop control during an advance. Therefore, it is necessary to have sites prepared at all army control posts for landing them.

Besides delivering written military documents, helicopters can be used to support ultra-shortwave radio communications with control posts of large units, which cannot establish direct communications with stationary radio centers. The commander or an officer of the army staff can fly by helicopter to the appropriate control posts and to the troops at any time.

In addition to this, there should constantly be a sufficient number of motor vehicles at each army control post and at communications posts on





march routes to deliver combat instructions to the troops and bring representatives from the division staffs to the nearest post which has wire or radio communications for meetings.

During an army's advance it is extremely important to properly determine and organize the movement of communications forces and means. Those means which are intended for setting up communications centers of control posts and stationary radio communications centers must be allocated and set up in the appropriate places in a timely manner, so as to be in readiness at the initiation of troop movement. The main portion of the communications forces and means will be moved with the army command post.

We must keep in mind that the expenditure of communications forces and means of an army in regrouping will be extremely great; therefore, some means of large units also should be allocated for setting up communications posts on march routes. In so doing, it is advisable to allocate means from divisions moving in the first echelon to set up communications posts on terminal sections of routes, and means from divisions carrying out the march in the second echelon to set up communications posts on the initial sections.

In conclusion let us point out that setting up and supporting communications during the regrouping of troops from the interior of the country with the initiation of a war is an extremely complex matter, requiring decisive planning and the timely conduct of a number of measures, especially ones concerning the use of state communications means. Instructions of the General Staff, coordinated with the Ministry of Communications and the corresponding institutions of allied countries are needed. The staffs of operating fronts will also have to give sufficiently comprehensive instructions for employing the means of front communications systems in support of formations which are carrying out regroupings and entering the composition of these fronts.

We feel that in peacetime it is advisable to conduct practical training exercises with civilian communications organs in allocating channels and forming a communications system to support the control of troops during regroupings.

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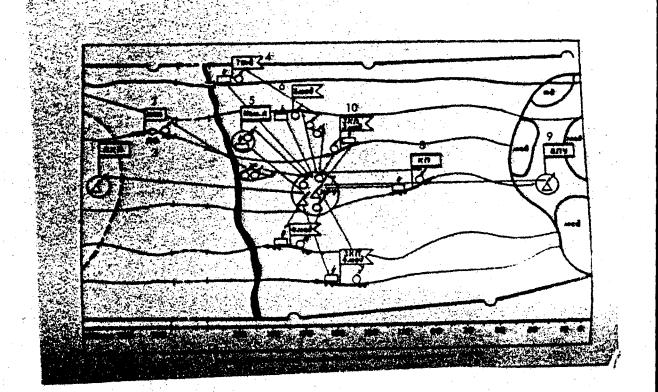
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Diagram 1. Support of radio communications from the stationary radio center (NRU).

- forward command post
 motorized rifle regiment
 forward detachment
 tank division
 army commander

- 6. motorized rifle division

- 7. stationary radio center
 8. command post
 9. auxiliary control post
 10. alternate command post of motorized rifle division





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Diagram 2. Employment of wire communications during the regrouping of troops over great distances

- 1. communications posts
 2. communications center
 3. front headquarters
 4. forward command post
 5. command post at a day's

 balt area

 6. motorized rifle division

 7. auxiliary control post

 8. communications center of the main axis

 9. General Staff of the Armed Forces

 10. tank division halt area

